

Patent Claims

5 1. Device for mixing substances, comprising:

a processor unit;

a local memory unit to store mixing formulas;

a display unit and an input unit operably connected with the processor unit;

10 a measuring device by which portions of substances in quantities determined according to a mixing formula are filled manually or automatically into a container, wherein the processor unit is connected to a communications module for establishing a communications connection wirelessly to a data server via which data of the mixing formulas can be transmitted to the local memory unit
15 and used to control the measuring device.

2. Device according to claim 1, wherein the communications module operates according to at least one mobile radio protocol or/and according to at least one Wireless Local Area Network protocol, and is suitable for establishing
20 communications connections.

3. Device according to claim 2, wherein the connection to the data can be created wirelessly via at least one of a public radio network (PLMN), a wireless local network (W-LAN), and a public communications network (PLMN, PSTN).
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4. Device according to claim 3, wherein the connection to the data server takes place via the Internet, and that installed in the processor unit or in the communications module is a browser which operates using at least one of a Wireless Application Protocol (WAP) and a Hypertext Transfer Protocol (HTTP).
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5. Device according to claim 1, wherein via the input unit, a mixing formula is selected and called up from the memory unit, and that reference and actual

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values, and/or a difference of the reference and actual values, are visualized on the display unit for manual addition of the substances to be mixed.

5 6. Device according to claim 1, wherein the processor unit acts via a drive unit on valves of supply pipes for supplying the substances to the container.

7. Device according to claim 6, wherein, via the input unit, a mixing formula can be selected and called up from the memory unit, and that via the drive unit desired quantities of the substances are filled into the container automatically.

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8. Device according to claim 1, wherein the measuring device is a scale into which the processor unit, the memory unit, the display unit, the input unit and the communications module are integrated.

15 9. Device according to claim 1, wherein the display unit and the input unit are combined into one unit.

20 10. Method of operating a device according to claim 1, wherein the device regularly or as needed creates wireless communication connections to a data server, and on each occasion, up-to-date data of mixing formulas are transmitted to the local memory unit of the device.

11. Method according to claim 10, wherein the data transmitted to the local memory unit includes:

- 25 a) new mixing formulas,
b) modifications to existing mixing formulas; and/or
c) replacements for existing mixing formulas.

30 12. Method according to claim 10, wherein updating of data in the local memory unit takes place:

- a) before a start, or after an end, of a mixing process;
b) at predefined fixed, or at selectable time intervals;
c) in response to manual control, or;

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d) in response to being initiated by the data server.

13. Method according to claim 10, wherein a mixing formula selected using the input unit is called up from the memory unit, a respective reference value and an actual value measured by the measuring device and/or a difference of the reference value and the actual value, are visualized on the display unit, and a desired quantity of the substance to be filled is manually filled into the container.

14. Method according to claim 10, wherein the processor unit of the device acts via a drive unit on valves of supply pipes to supply the substances to the container, and using the input unit, a mixing formula is selected and called up from the memory unit, and using the drive unit, desired quantities of the substances are filled into the container automatically.

15. Device according to claim 1, wherein the substances are coloring substances.

16. Device according to claim 4, wherein via the input unit, a mixing formula is selected and called up from the memory unit, and that reference and actual values and/or a difference of the reference and actual values, are visualized on the display unit for manual addition of the substances to be mixed.

17. Device according to claim 4, wherein the processor unit acts via a drive unit on valves of supply pipes for supplying the substances to the container.

18. Device according to claim 4, wherein the measuring device is a scale into which the processor unit, the memory unit, the display unit, the input unit and the communications module are integrated.

19. Method according to claim 11, wherein updating of data in the local memory unit takes place:

- a) before a start, or after an end, of a mixing process;
- b) at predefined fixed, or at selectable time intervals;

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- c) in response to manual control, or;
- d) in response to being initiated by the data server.

20. Method according to claim 19, wherein a mixing formula selected using the
5 input unit is called up from the memory unit, a respective reference value and an
actual value measured by the measuring device and/or a difference of the
reference value and the actual value, are visualized on the display unit, and a
desired quantity of the substance to be filled is manually filled into the container .

10 21. Method according to claim 19, wherein the processor unit of the device acts
via a drive unit on valves of supply pipes to supply the substances to the
container, and using the input unit, a mixing formula is selected and called up
from the memory unit, and using the drive unit, desired quantities of the
substances are filled into the container automatically.

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